CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM
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B233 Forster's Tern Sterna forsteri
Family: Laridae Order: Charadriiformes Class: Aves

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Common to abundant along the coast of California in marine subtidal and estuarine waters from May to September. Also common to uncommon then inland at open lacustrine and riverine habitats. Uncommon along the coast north of Sonoma Co. (McCaskie et al. 1979). Numbers decline in northern California in fall and winter, but not in southern California. Nests on salt-pond levees and low islands in emergent wetlands and bays (Cogswell 1977). Between 1200 and 2500 pairs breed in San Francisco Bay (Gill 1973, Rigney and Rigney 1981), up to 500 pairs at San Diego Bay (Garrett and Dunn 1981), and up to 200 pairs in some years at the Salton Sea. Also nests very locally in the interior of northern California (McCaskie et al. 1979), especially in the northeastern plateau and Central Valley (Cogswell 1977). There is a southward migratory movement in fall, with most of the northern California population wintering from southern California south to South America (Gill and Mewaldt 1979).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Feeds mainly on small fish in saltwater and freshwater habitats by hovering over prey and then diving from a height of 3-10 m (10-33 ft). Also may scoop small prey from shallow water without diving (Cogswell 1977). Also feeds on aquatic insects, crustaceans, and small amphibians.

Cover: This species roosts on pilings, low boardwalks, and floating objects, or gathers in small, dense flocks along open shores.

Reproduction: Nests on open to fairly open levees and low islands in lakes, salt ponds, or lagoons. Also uses matted reedbeds (Garrett and Dunn 1981), sometimes floating (Cogswell 1977). Nesting colony generally less than 100 m (330 ft) from open water. Nest is a scraped depression in soil; sometimes lined with bones, sticks, or mud clods. Gill (1973) suggested that isolation of nesting colony is important for protection, as with other colonial nesters.

Water: No requirement for fresh water reported.

Pattern: For nesting, requires low, mostly barren dikes or islands near feeding areas in saltwater bays, lagoons, or freshwater lakes. Abandoned pilings, low boardwalks or exposed beaches are needed for roosting.

SPECIES LIFE HISTORY

Activity Patterns: Yearlong, diurnal activity.

Seasonal Movements/Migration: Banding indicates most of the California population winters October through April from southern California to South America.

Home Range: Pugh (1963) found an average of 10 resting on muddy tideflats within a 3.2 km (2 mi) transect censused repeatedly in water at Silver Strand, San Diego Co. Other winter censuses of small plots in coastal lagoons and marsh borders in southern California, have included (average number/km²; = 0 .38 mi²) 15-16 in a marsh plot bordering a channel (Minsky 1982), 20 and 13 in Long Beach Marine Stadium (Harrington and Vierheller 1981, Harrington 1982); and others ranging to 49/km². On another plot of intertidal "outer" mudflat at Hayward, mean density ranged from 0-29/km² at various seasons and tide levels, with the maximum in spring. In 3 newly created tidal lagoons, numbers varied from 0-75/km², most occurring in summer (Cogswell 1981).

Territory: McNicholl (1971) suggested a feeding territory, but did not suggest a size. Inter-nest distances in colonies varied from 0.2 to 66 m (0.65 to 215 ft), with an average of 0.8 to 6.8 m (2.6 to 22.1 ft) (McNicholl 1971).

Reproduction: Breeds late April to mid-September, with a peak in June and July (Bent 1921). A monogamous, colonial nester; average clutch 2.6 eggs. San Francisco Bay colonies averaged 2.7 eggs (Sibley 1952, Gill 1973). Both adults take part in incubation, which lasts 23 days. Hatching closely synchronized between colony members (McNicholl 1983). Number of broods unknown; but from date spans of colony activity, apparently only one, except for possible renesting after egg loss. Semialtricial young wander from the nest within 1 wk, and are cared for by both parents. First breeding probably occurs after 2nd yr.

Niche: Predation by various mammals is important in San Francisco Bay colonies. Salt ponds and associated dikes, together with nearby bays and lagoons, apparently provide optimum breeding-season habitat. Swarth (1981) found regular occurrence on salt ponds in winter, with a maximum count of 159 on a pond.

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